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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/003,912	10/31/2001	Frederick W. Giacobbe	S5627	7719
7590	10/13/2004			EXAMINER FORTUNA, JOSE A
Linda K. Russell Air Liquide 2700 POST Oak Blvd., SUITE 1800 Houston, TX 77056			ART UNIT 1731	PAPER NUMBER

DATE MAILED: 10/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/003,912	GIACOBBE, FREDERICK W.	
	Examiner	Art Unit	
	José A. Fortuna	1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 7/23/04.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-65 is/are pending in the application.

4a) Of the above claim(s) 8-57 is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-7 and 58-65 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of group I in the reply filed on July 23, 2004 is acknowledged. The traversal is on the ground(s) that the composition and the method of using it are related as combination-subcombination. Also that there is no case log that indicates that the inventions need to be in the same category in order to be considered combination-subcombination and that the MPEP, 806.05(c) indicates the opposite, i.e. that the combination-subcombination don't need to be in the same category. This is not found persuasive because the examiner could not find where in the MPEP section 806.05(c) states the alleged fact. Also, applicant is reminded that restriction is non-appealable, but petitioned, so there are no many cases involving restrictions. Moreover, if the composition were tied up to its method of using as combination-subcombination, then what would be the point to classify the composition as a different category of invention? If the composition were attached to the method of using as Combination-Subcombination then it would be comparing apples to oranges, which does not make any sense. As to the other groups as explained in the previous office action, the arguments are moot since the composition was elected and switching invention is not permitted.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 8-57 withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on October 27, 2003.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Giacobbe in “Heat transfer Capability of Selected Binary Gaseous Mixtures Relative to Helium and Hydrogen.”

Giacobbe teaches a binary mixture of Hydrogen and Argon, see abstract. The concentration of Hydrogen in the mixture varies from 0 to 100%, which falls within the claimed ranges; see figure 3 and pages 203-204.

Note that the intended use of a composition does not define it, i.e., the composition. It is office position that claims in a patent application cannot be held to involve invention, if the composition defined in such claims is not novel, and of course, patents for old compositions of matter based on a new use of such composition without change therein may not lend patentability to claims. In re Thuau 30 C.C.P.A. 979, 135 F.2D 344, 57 USPQ 324.

5. Claims 58-65 are rejected under 35 U.S.C. 102(b) as being anticipated by Kirov et al., in “determination of Heat Transfer Coefficient for gas mixtures containing helium and Hydrogen.”

Kirov et al. teach a mixture of Helium and Hydrogen with heavy gases for determining the heat transfer coefficients. In figure 1, Kirov et al. show Mixtures of

Helium-Carbon Dioxide and Hydrogen-Carbon Dioxide Mixtures in concentration of the heavy component between 0 to 100%, which implies that the concentration of the other component, i.e., Helium or Hydrogen varies from 100 to 0%.

Note that the intended use of a composition does not define it, i.e., the composition. It is office position that claims in a patent application cannot be held to involve invention, if the composition defined in such claims is not novel, and of course, patents for old compositions of matter based on a new use of such composition without change therein may not lend patentability to claims. In re Thuau 30 C.C.P.A. 979, 135 F.2D 344, 57 USPQ 324.

6. Claims 57-64 are rejected under 35 U.S.C. 102(b) as being anticipated by Bammert et al., in "The Influence of He-Ne, He-N₂, and He-CO₂ Gas Mixtures on Closed-Cycle Gas Turbines."

Bammert et al. teach binary mixtures of helium with heavy gases such as CO₂ and N₂. The proportion of Helium to heavy gas falling within the claimed range, i.e., from 0 to 100, see figure 2.

Note that the intended use of a composition does not define it, i.e., the composition. It is office position that claims in a patent application cannot be held to involve invention, if the composition defined in such claims is not novel, and of course, patents for old compositions of matter based on a new use of such composition without change therein may not lend patentability to claims. In re Thuau 30 C.C.P.A. 979, 135 F.2D 344, 57 USPQ 324.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to José A. Fortuna whose telephone number is 571-272-1188. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on 571-272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


José A. Fortuna
Primary Examiner
Art Unit 1731

JAF